

REMARKS/ARGUMENTS

The Examiner has indicated that Claims 52-53 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 48, presented with this Amendment, incorporates the subject matter of Claim 52, Claim 52 having been cancelled. Additionally, Claim 53 has been amended to recite that it depends on Claim 48. As thus amended, it is respectfully submitted that Claim 48, as amended, is patentable over all the references of record.

Claim 75 has been amended in a manner which basically tracks Claim 48, as amended, in the sense that it recites the dealuminating process, *i.e.*, it basically tracks the limitation of Claim 48, as amended.

Newly added Claim 76 is specific in its recitation that the catalyst/catalyst carrier is obtained from a layer-lattice silicate having smectite and/or montmorilliomite structure, the reduced aluminum content being obtained by a dealuminating process, the catalyst comprising phosphoric acid. It is respectfully submitted that Claim 76 is likewise patentable over all the references of record, particularly in its recitation that the catalyst comprises phosphoric acid.

Turning to the art rejections, Claims 48-51 and 55-61 stand rejected as being anticipated by Jorgensen, et al for reasons set forth in paragraphs 1-3 of the Office Action. As noted above, Claim 48 has been amended in the manner suggested by the Examiner, *i.e.*, by incorporating the limitations of Claim 52. Accordingly, since Claims 49-51 and 55-61 all depend upon Claim 48, as amended, it is respectfully submitted that those claims are patentable over Jorgensen, et al.

Regarding Claim 75, which as noted above has been amended, it is respectfully submitted that that claim is patentable for essentially the same reasons that Claim 48, as amended is patentable. In this regard, Claim 75 now recites that the dealuminating process comprises treatment with an acid followed by hydrothermal treatment at a specified temperature range and a partial water vapor pressure of between 4 and 80 bar_{abs}. Moreover, Claim 75 clearly claims a product which is not disclosed or suggested by Jorgensen. In this regard, it is respectfully submitted that the Examiner is ignoring the express teachings of Jorgensen regarding the fact, as noted in column 12, lines 21-25, that the crystalline dealuminized product obtained by the Jorgensen method has substantially the same crystallographic structure as that of the starting aluminosilicate zeolite, albeit with increased silica/alumina ratios. The Jorgensen process and accordingly the product does not convert a beta zeolite to a layered-lattice silicate as the above lines of the Jorgensen patent make clear. Rather, Jorgensen starts with a zeolite and ends up with a zeolite - only the silica-alumina ratio being changed.

The express wording of the Jorgensen patent, with reference to the above cited lines, unequivocally states that there is no conversion of a beta zeolite to a layer-lattice silicate. If that were not true, Jorgensen would not make the statement set forth in the cited lines, i.e., that the dealuminized product has substantially the same crystallographic structure as that of the starting aluminosilicate zeolites. *Ipso facto*, Applicants' catalyst or catalyst/catalyst carriers are different from anything disclosed in Jorgensen by the very fact that they specifically claim a layer-lattice silicate while Jorgensen merely teaches a process which changes the silica-alumina ratio of the zeolite but does nothing to alter its structure, i.e., convert it to a layer-lattice silicate. It cannot

reasonably be argued that a composition having a layer-lattice is the same as one that does not possess such crystallographic structure. Accordingly, over and above the fact that Claim 75 specifically calls for a lattice-layer silicate, a crystallographic structure neither disclosed or suggested by Jorgensen, Claim 75 also recites the nature of the dealuminating process which the Examiner has indicated, as to Claim 48 (as amended) is allowable. Having demonstrated that Claim 75, as amended, is patentable over Jorgensen, it is respectfully submitted that all claims dependent thereon are likewise patentable over Jorgensen.

With respect to newly added Claims 76 and 77, Claim 76 recites that the catalyst/catalyst carrier is obtained from layer-lattice silicates having smectite and/or montmorillinite structure having the reduced aluminum content, the catalyst comprising phosphoric acid. Claim 77 adds to the limitation regarding the specific dealuminating process. Once again, Applicant wishes to stress that Claim 76, like Claim 75 calls for a specific structural material, i.e., a dealuminized lattice-layer aluminosilicate which is totally different from the zeolites disclosed in the Jorgensen reference. Furthermore, the recitation that the catalyst is phosphoric acid further distinguishes Claims 76 and 77 over the Jorgensen reference.

Claims 40-45 stand rejected as obvious over Jorgensen as applied to Claims 37 and 75, further in view of Lambert. This rejection is also respectfully traversed. The combination of Jorgensen and Lambert does nothing to cure the infirmities of the Jorgensen reference, as discussed above, and more specifically Lambert does not teach or suggest that the catalyst/catalyst carrier is obtained from lattice-layer silicates which have had their aluminum content reduced by a dealuminating process as set forth in Claim 75. Indeed, McWilliams teaches a process for making

a zeolite material from a lattice-layer structure -- this is directly contrary to Applicant's invention. Accordingly, it is respectfully submitted that Claims 40-45 are patentable over Jorgensen in view of Lambert.

Claims 46-47 stand rejected as obvious over Jorgensen as applied to Claims 36-37 and further in view of McWilliams. Claim 37, as noted above, depends upon Claim 75, the patentability of which has been amply demonstrated above. Since Claims 46-47 depend upon Claim 75, those claims are likewise patentable over the applied references. Specifically, McWilliams adds nothing to Jorgensen vis-a-vis negating the patentability of Claim 75. Accordingly, Claims 46 and 47, being dependent upon Claim 75, are likewise patentable over the combination of Jorgensen and McWilliams.

Applicant wishes to stress that product Claims 75 and 76 are not merely product by process claims which claim the same structure disclosed in Jorgensen. To begin with, the Examiner cannot equate Applicants' dealuminated layer-lattice silicates with Jorgensen's zeolites since the latter zeolites do not contain a layer-lattice silicate. Indeed, to take a contrary position flies in the face of the wording of the Jorgensen patent in column 12, lines 21-25 where Jorgensen specifically points out that by the dealuminizing process there is no change in the crystallographic structure, i.e., Jorgensen does not disclose a layer-lattice silicate - only a zeolite that has increased silica alumina ratios. Furthermore, Claims 75 and 76 have been amended to call for other limitations which avoid the Jorgensen reference, i.e., in Claim 75 a specific recitation of the dealuminating process and in Claim 76 the recitation that phosphoric acid is the catalyst.

In view of the foregoing amendments and remarks, it is respectfully submitted that all pending claims are in condition for allowance, which is hereby earnestly solicited and respectfully requested.

Respectfully submitted,



C. James Bushman

Reg. No. 24,810

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BROWNING BUSHMAN P.C.

5718 Westheimer, Suite 1800

Houston, TX 77057-5771

Tel.: (713) 266-5593

Fax: (713) 266-5169

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By: _____

C. James Bushman